N° 21,484 A.D. 1903

Date of Application, 6th Oct., 1903—Accepted, 25th Feb., 1904

COMPLETE SPECIFICATION.

Improvements in Trusses.

I, WILLIAM SEWARD RICE, Physician, of Adams, in the County of Jefferson, and State of New York, United States of America, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to improvements in trusses for hernia or rupture. In the use of these structures two great difficulties are experienced, first, it is always hard to properly fit the truss, for in arranging the body straps the pad or pads often become displaced and in replacing the same a rearrangement of the straps may be necessary, all of which occasions delay and vexation. One of the objects of this invention is to provide a structure which will permit the adjustment of the pad after the truss has been applied and the straps properly fitted, said means being very simple and constituting a fastener for holding the pad in place after its adjustment. A second difficulty experienced is the keeping of the truss in its proper operative position. It is also the object of the present invention to provide efficient means for properly holding the pad, and furthermore, to employ a structure in which inward strains of different degrees may be imparted to said pad.

The preferred means for accomplishing these various objects is illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view of a truss constructed in accordance with the present invention.

Figure 2 is a sectional view on an enlarged scale through a portion of the same.

Figure 3 is a view in elevation on an enlarged scale of the head and pad securing means.

Figure 4 is a rear elevation of the pad with the washer removed.

Figure 5 is a detail perspective view of the washer.

Figure 6 is a detail perspective view of the adjusting plate employed

Similar reference numerals indicate corresponding parts in all the figures of the drawings.

In the embodiment illustrated, a head 10 is employed having an extension 11 to which is fastened one end of a body strap 12, by means of a suitable buckle 13. The other end of this body strap carries two smaller straps 14, adjustably secured thereto by buckles 15 and having fasteners 16 at their free ends, which fasteners are arranged to engage suitable studs 17 arranged upon the rear face of the head. The head is provided with a circular opening 18, and a bearing disk 19 secured upon the head surrounds said opening, being, preferably, held in place by the studs 17 and having a radial series of notches 20 in its inner edge.

The pad employed comprises a body portion 21 having a knuckle 22 projecting from its operative face. A washer 23 is also used with this body portion and is arranged to be detachably fastened to the rear side thereof. A positioning extension in the form of a horn 24 is also employed which is adapted to be

placed at the lower end of the body 21, and has upwardly extending ears 25, that may be applied either against the rear face of the washer or the pad and secured thereto by fastening screws 26. The horn has a suitable loop 27 on its rear side and through the same is passed a breech strap 28, one end of which is secured to the body strap 12, as shown at 29, the other end having a suitable fastener 30, which is arranged to detachably engage the lower stud 17 carried by the head.

For the purpose of attaching the pad to the pad-supporting means above described, an adjusting plate 31 is rotatably mounted in the opening of the head 10, and has offset terminals 32 carrying outstanding prongs 33 which are arranged to engage in the notches 20 of the bearing disk, as illustrated in Figs. 2 and 3. This adjusting plate is also provided with a longitudinal slot 34 and a clamping screw 35 is passed through the slot and into a suitable socket 36, one of said sockets being located in the washer 23, and one in the rear side of the pad body. The clamping screw is provided with a head which bears upon a suitable washer 37, interposed between said head and the clamping plate. This head does not project above the plane of the rear face of the disk and has a suitable operating bail 38 pivoted thereto and arranged when not in use to fit within the opening, as shown in Fig. 3.

The structure above described has many practical advantages. In the first place the straps may be properly fitted to the wearer before an accurate adjustment of the pad is made. Furthermore, the peculiar construction of the connection between the pad and the supporting means permits a wide adjustment of said pad. For instance, the pad is rotatable, the clamping screw acting as a pivot when loosened. Said screw is also longitudinally movable in the slot of the adjusting plate, and, as said plate is revoluble, the pad can thus be moved bodily in any direction. Furthermore, the parts are all held by the single clamping screw which constitutes secure fastening means. The horn extension is advantageous as it assists to a very great extent in holding the parts against displacement, especially the body pad and knuckle. Under certain conditions this extension may be dispensed with. Another important feature is the detachable washer. For many ordinary cases this washer may not be necessary, but when a greater inward pressure is desired upon the pad, by interposing the washer between said pad and the head, the belt will thus be arranged farther away from the operative face of the pad and when said belt is tightened a greater pressure will, of course, be brought upon said pad.

While the present embodiment of the invention has been very specifically described, it will be understood that the invention is not limited to this detailed construction but may be changed in various ways as will be apparent upon an inspection of the claims hereto appended.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. In a truss, the combination with a pad support, of an adjusting device movably mounted on the support, and a pad movably secured to the adjusting device.

2. In a truss, the combination with a pad support, of an adjusting device rotatably mounted on the support, and a pad secured to the adjusting device and movable thereon.

3. In a truss, the combination with pad-supporting means, of a pad having rotatable and adjustable connections with the supporting means.

4. In a truss, the combination with an adjustable plate having a longitudinally disposed slot, of a pad, and a clamping screw passing through the slot engaging the pad.

5. In a truss, the combination with a pad support having an opening, of an adjusting device revolubly mounted in the opening and bearing against the

support, a pad, and a clamp passing through the adjusting device and engaging the pad.

6. In a truss, the combination with a pad support having an opening and notches surrounding the opening, of an adjusting device revolubly mounted in the opening and having prongs that engage in the notches, a pad, and a clamping screw passing through the adjusting device and engaging the pad.

7. In a truss, the combination with a pad support having an opening, of an adjusting plate revolubly mounted in the opening and having a slot, a pad, and a device for securing the pad to the plate, said device passing through the slot.

8. In a truss, the combination with a head having an opening, of straps secured to the head, a bearing disk surrounding the opening in the head and having notches, an adjusting plate revolubly mounted in the opening and having terminal prongs that engage the notches in the bearing disk, a pad arranged against the inner face of the head, and a clamping screw passing through the slot of the adjusting plate and engaging the pad.

9. In a truss, the combination with pad supporting means, of a pad, and means for securing the pad to and at different distances from the supporting means.

10. In a truss, the combination with pad supporting means, of a pad, means for securing the pad to the supporting means, and a movable washer arranged to be placed and secured between the supporting means and the pad.

11. In a truss, the combination with pad supporting means, of a pad, means for securing the pad to the supporting means, a washer arranged to be placed between the supporting means and pad, a positioning extension, and means for securing the extension either to the pad or washer.

12. In a truss, the combination with a pad, of a positioning extension having spaced ears arranged to rest against the rear face of the pad, and means for fastening the ears to the pad.

Dated this 6th day of October, 1903.

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RICE'S Complete Specification. *(1 SHEET)*

Fig. 1.

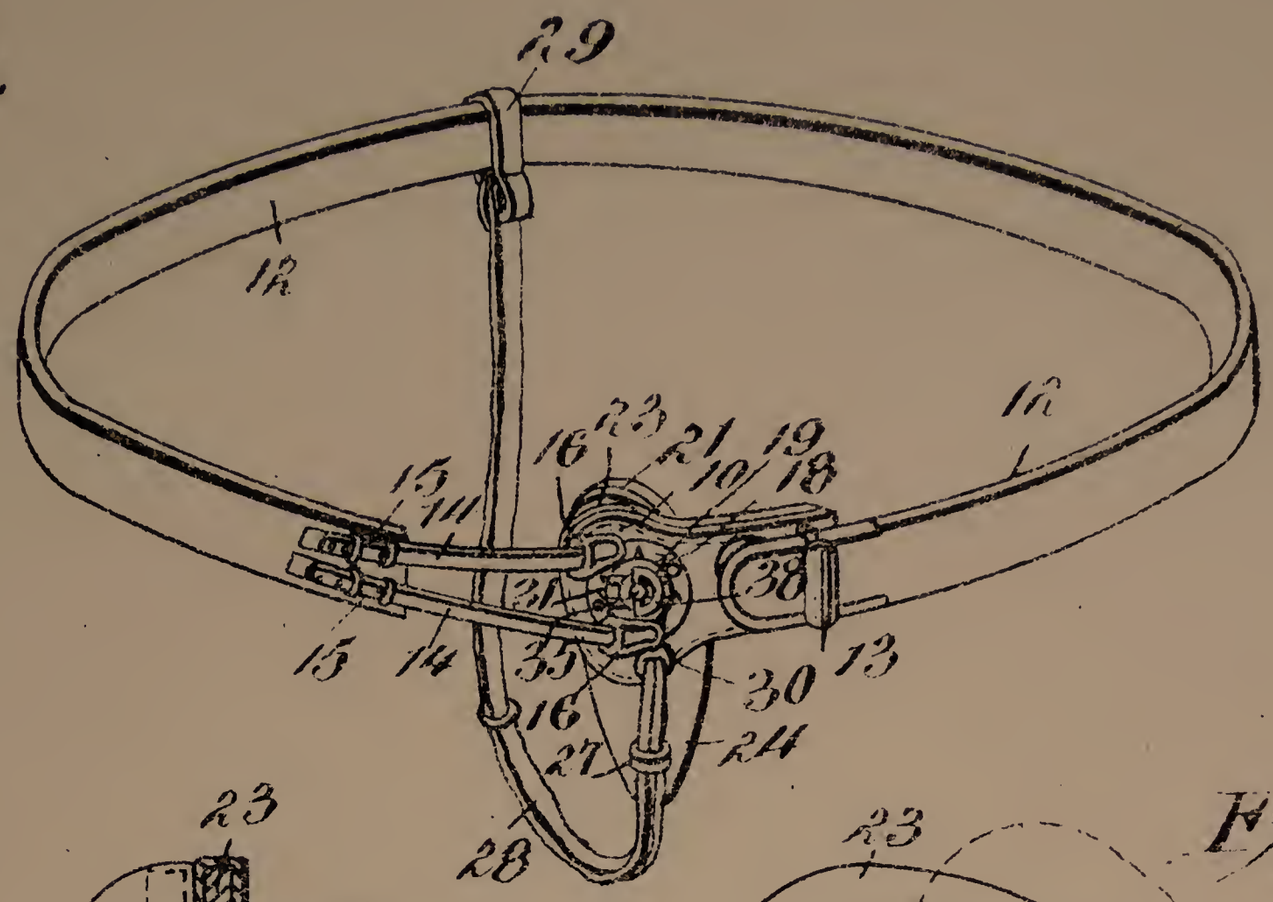


Fig. 2.

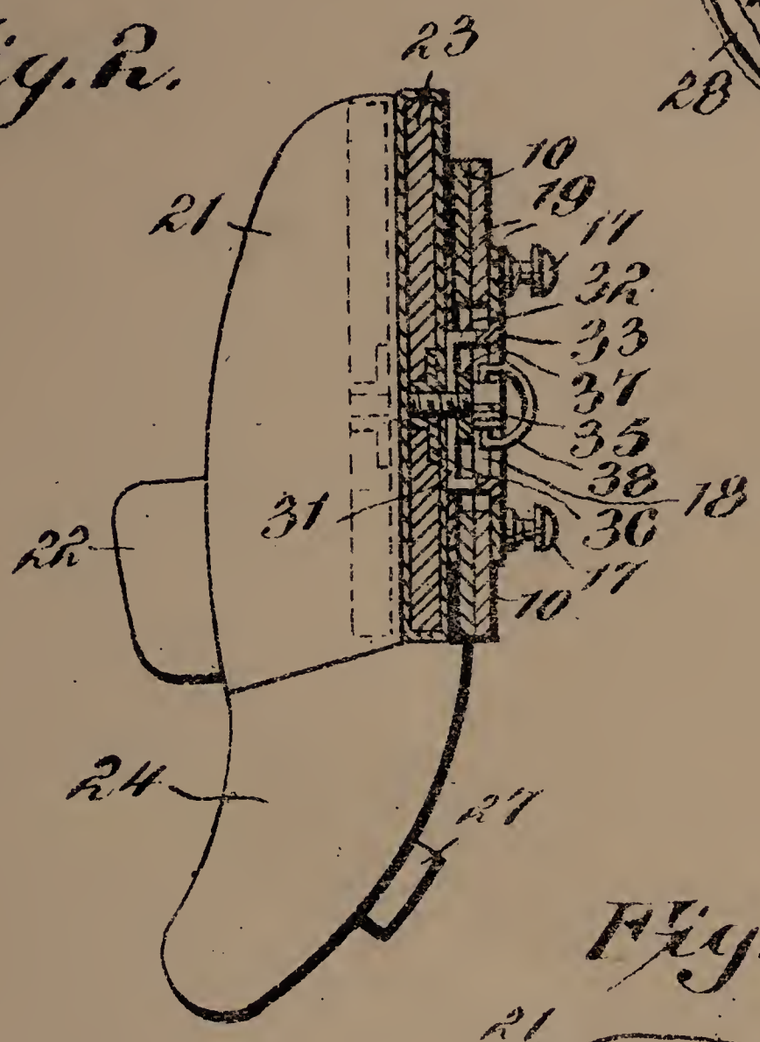


Fig. 3.

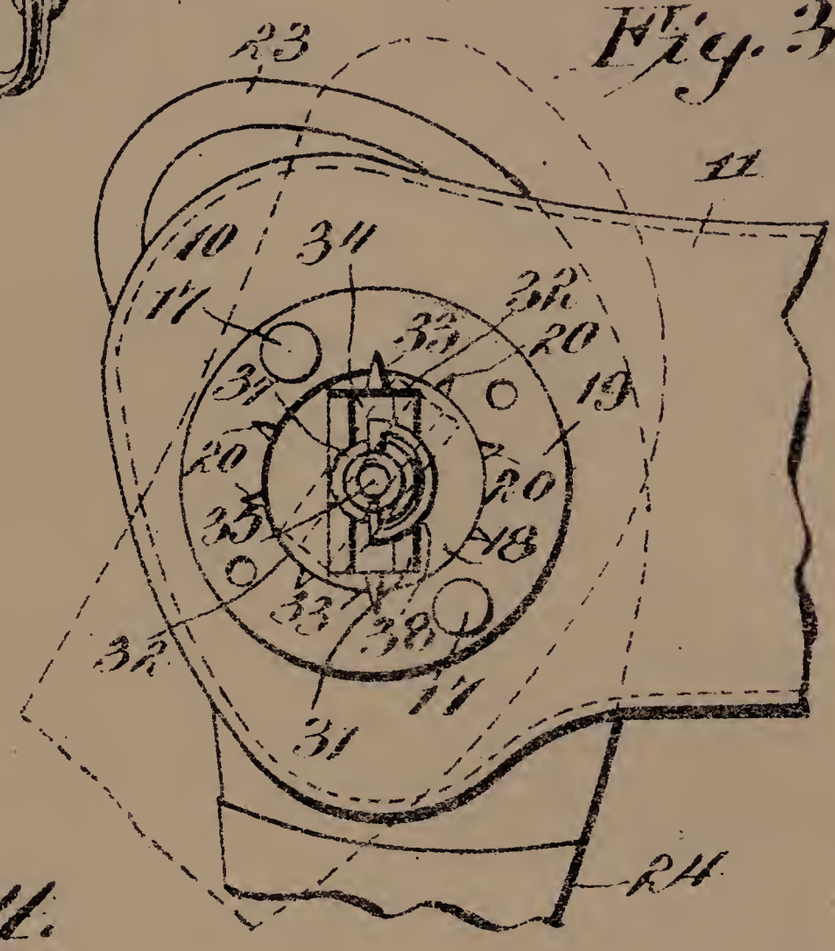


Fig. 4.

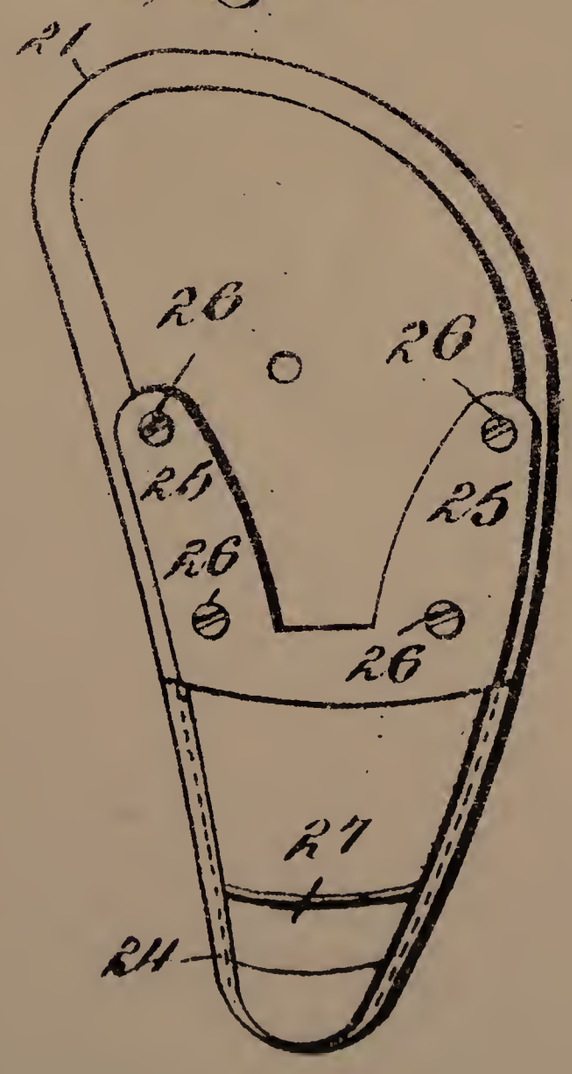


Fig. 5.

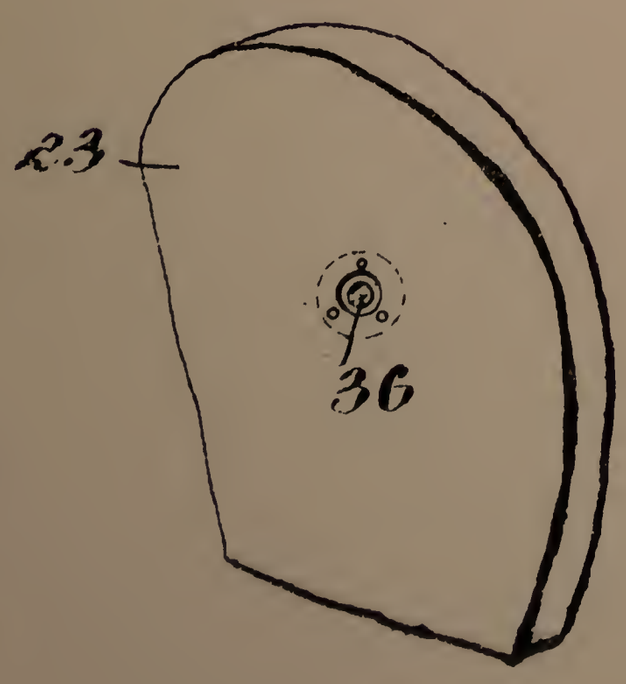
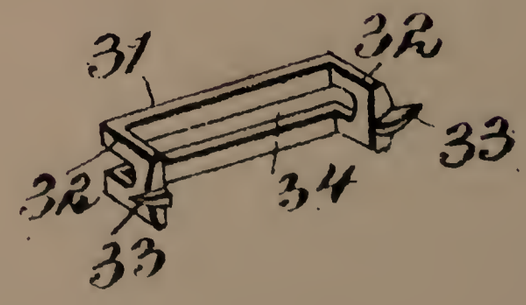


Fig. 6.



[This Drawing is a reproduction of the Original on a reduced scale.]

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